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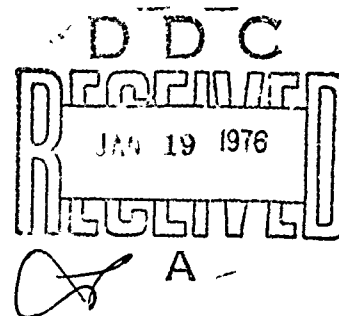
25 AUGUST 1975

STUDENT
ESSAY

SAUDI ARABIAN NATIONAL
GUARD MODERNIZATION
THROUGH U.S. ARMY
PROJECT MANAGEMENT

BY

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USAWC ESSAY

⑨ Student essay ✓

⑥ SAUDI ARABIAN NATIONAL
GUARD MODERNIZATION
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This report

The text outlines the development and organization of the Project Manager's Office for the modernization of the Saudi Arabian National Guard. It lays out the managing of the program through FMS sales cases to include materials, construction and contract training of the National Guard Units by a U. S. Contractor. *It -> Examples are given -* gives examples of the modernized units organization and *lists of* equipment and costs associated with the program. The Essay presents a pattern *is described, but* for a new type of military assistance through U.S. Army management and U.S. civilian contractors. Data was gathered using U.S. Government official records and records of the Government of Saudi Arabia, personal interviews and on site experience of the author. *they affect* The effects of Political and Press pressures are examined as *it affects* the continuation of the United States influence in Saudi Arabia.

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THE SAUDI ARABIAN NATIONAL GUARD

The Saudi Arabian National Guard, (SANG) sometimes referred to as the White Army, is one of the two standing military ground forces in Saudi Arabia. It is commanded by Prince Abdullah Ibn Abdul Aziz--third in line to his half-brother King Khalid and Second Deputy Prime Minister of the Kingdom. This 26,000 man Bedouin internal security force is responsible for guarding the country's rich oilfields and the petroleum export facilities. They also provide the key bodyguard units for the Royal Family. Additionally, the National Guard supplements the 36,000 man Saudi Arabian Regular Army as required. The Guard has a number of light infantry battalions with a miniscule support structure and very little in the way of a command and control structure for operations above battalion level. Efforts to form regular units in the National Guard began in 1964 when the King brought in 150 Jordanian Officers with a group of British advisors to organize disciplined units within the National Guard. A training system for technicians and officers and a logistical support system were devised, and an operation Staff was formed. Present Command and Staff Organization of the SANG is shown at figure 1.

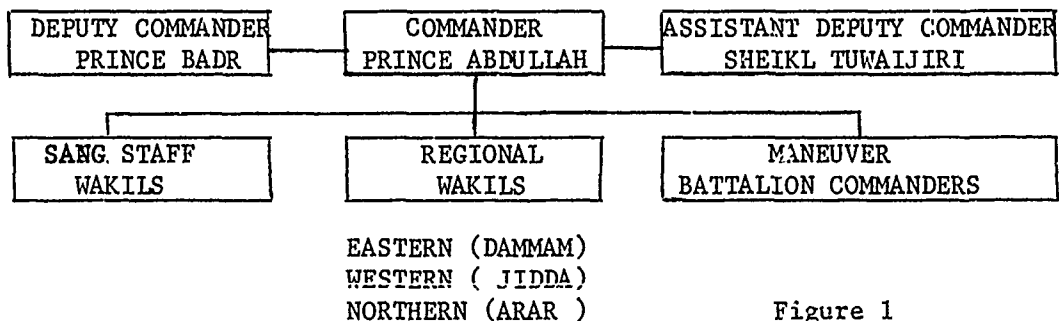


Figure 1

Much remains to be done to produce a modern fighting force. With King Faisal's permission Prince Abdullah turned to the United States to gain assistance in accomplishing this task.

The Modernization Program of SANG was formalized by a Memorandum of Understanding between the Governments of the United States and Saudi Arabia, effective 19 March 1973, signed by His Royal Highness Prince Abdullah Ibn Abdul Aziz, Commander of the Saudi Arabian National Guard, and the Honorable Nicholas G. Thacher, then U.S. Ambassador to Saudi Arabia. Under the terms of the agreement, the United States agreed:

"To provide technical and supervisory assistance to the government of Saudi Arabia in connection with: preparation of a National Guard Modernization Plan to cover such functions as organization, training, procurement, construction, maintenance, supply and administrative support; development and administration of training programs, procurement of facilities, materials, equipment and services necessary to implement the Plan. Supervision of the design and construction of training, maintenance, supply and communication facilities, and other facilities related thereto, as necessary to implement the plan. Management of the establishment and operation of training, administrative and logistic support elements." ¹

The United States Government further agreed to provide defense articles and service related to the Saudi Arabian National Guard Modernization Program to the Government of Saudi Arabia on a reimbursable basis under the Foreign Military Sales Act. Articles to be provided include: small arms, artillery, vehicles, communications equipment, ammunition and other items. Services to be provided include the development, construction, management and operation of communications, training, logistics and maintenance support facilities and service related thereto. Services will be carried out by

US commercial firms selected by and under contract to the Department of Defense of the United States in accordance with established FMS procedures.

2. To schedule the deliveries of the articles and services in close coordination with designated officials of the Saudi Arabian Government and in accordance with the overall National Guard Modernization Plan.

3. To the extent practical, undertake to combine production for Saudi Arabian defense articles and equipment with production of U.S. requirements so as to gain maximum cost savings for the Government of Saudi Arabia.

Under the terms of the Agreement, Saudi Arabia agreed:

"To be responsible for payment of all defense articles and services procured for the program, to be responsible for necessary planning, programming, priority establishment, recruitment and selection processes which are required to provide qualified manpower and all other such supporting facilities and services required for this program; to give the Modernization Program priority over any other project for improvement of the National Guard."²

The Memorandum of Understanding and subsequent agreements committed the United States Government to organize, equip, and train four battalions of mechanized infantry and one battalion of light artillery within the SANG. The U.S. is to establish a training capability and logistics activity for the SANG to support the training battalions; and to construct necessary facilities to support these goals. As the DOD Executive Agent for the SANG Modernization Program, the Department of the Army assigned responsibility for the general management and execution of the program to the Commander, U.S.

Army Materiel Command.

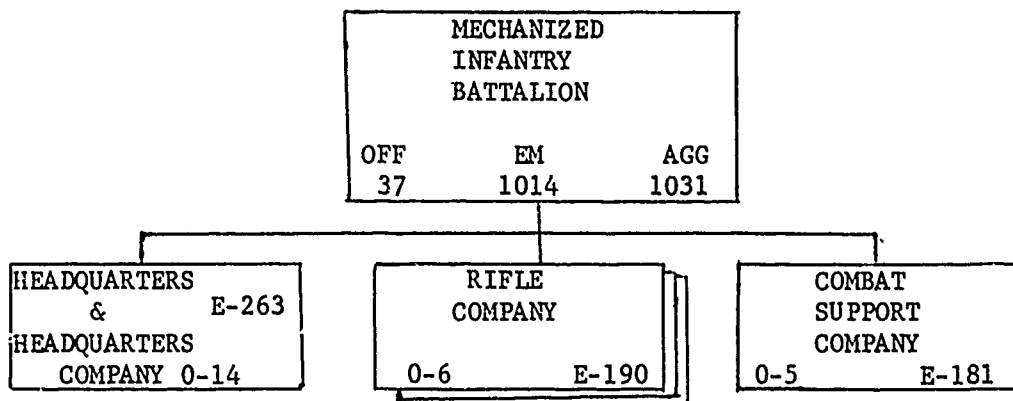
US ARMY TAKES CHARGE

From 17 July until 23 August 1973, a US Army technical evaluation team surveyed the environment, missions, tactics organization, logistics personnel system and state of training of the National Guard throughout Saudi Arabia. The Team was oriented towards the organization, training and equipping of two mechanized battalions with a wheeled armored car as the principal combat equipment. On the basis of the information and findings of the Team, a comprehensive plan for the Modernization Program was prepared and staffed at Army Materiel Command, Department of Army and Department of Defense during the period August through November 1973. In January 1974, the proposed US plan was presented to the Saudis. Approval of both governments for the plan had been secured by January 1974.³

Meanwhile, the Project Manager was formally chartered by the Secretary of the Army on 9 April 1974. The Project Manager's Charter gives the Project Manager the mission to manage the program to modernize the SANG under the terms of the Memorandum of Understanding between the two governments. Specifically the Project Manager is responsible for planning, directing and controlling the resources authorized for the program; preparing and maintaining a Master Plan for the management of the program; coordinating and documenting all approvals, plans, and contracts required by DOD, State, and other US Government agencies relative to the program, except for the construction aspects of the program under the purview of the Corps of Engineers.

the unit to conduct independent sustained combat operation. The major units in the battalion are a headquarters and headquarters company, three rifle companies, and a combat support company. A block organization chart of the battalion is at figure 2.

Figure 2



NOTE: The battalion has these major items of equipment

Armored cars	96
Air Defense weapons	6
Tactical radios	143
Artillery weapons	4
Commercial vehicles	142

When engaged in combat, the mission of the battalion is to close with the enemy by fire and maneuver in order to destroy him or, when in the defense, to repel his assault by fire, close combat, and counter attack. This battalion is one hundred percent mobile using organic transportation. The Headquarters and Headquarters Company provides command, control, administration, engineer and logistical support to the elements of the battalion. The three rifle companies of the battalion form the nucleus of fighting strength which other elements of the battalion must compliment. It consists of a company headquarters three rifle platoons and a mortar platoon. The Combat-Support Company is to furnish reconnaissance, anti-tank protection,

and air defense fire for elements of the battalion.

Associated with the mechanized infantry battalion is a modernized field artillery battalion.

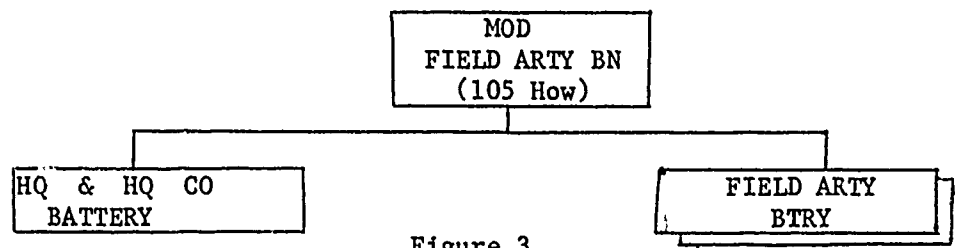
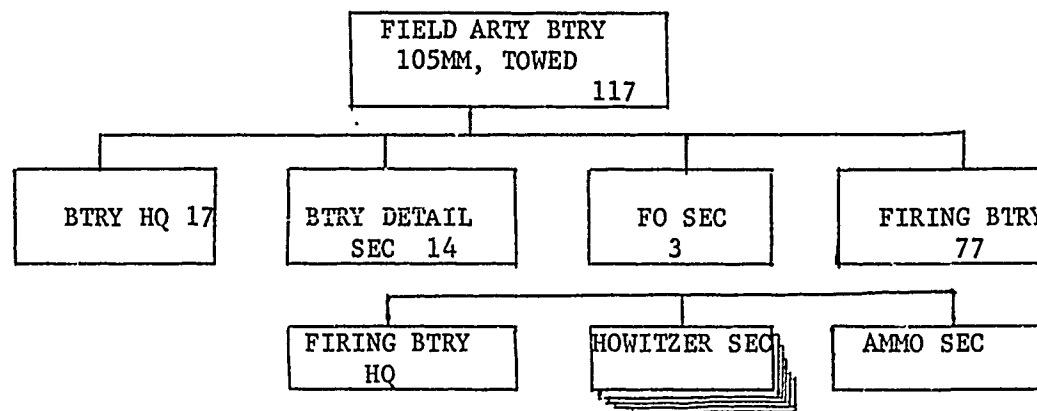


Figure 3

In concept, the batteries of the artillery battalion can be attached to the mechanized battalions for task operations, or, the battalion's batteries can be used in general support of one or more mechanized battalions.

Figure 4 shows the structure of the modernized field artillery battery.



NOTE: Personnel figures shown in each Manpower Unit: Figure 4

The present artillery battalion TO&E calls for three such batteries and six howitzers in each battery; however, in recognition of SANG headquarter's recently expressed desire for the capability of having a modernized battery to attach to each mechanized battalion,

The Project Manager (PMO) is considering revising the Artillery battalion TO&E to include four batteries, each with four howitzers.

Looking back to the mechanized infantry battalion structure, the combat support company should be highlighted. See Figure 5.

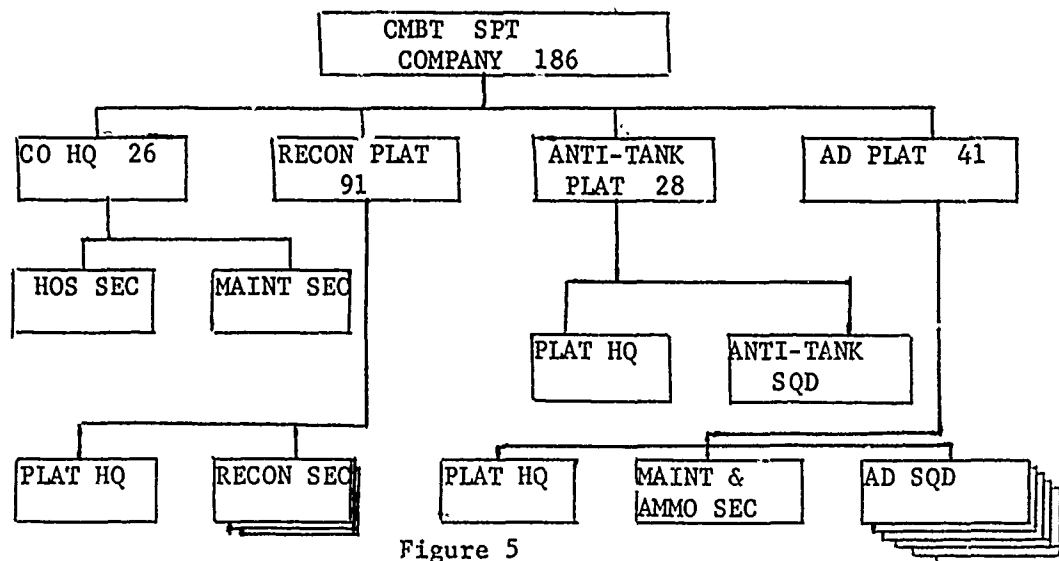


Figure 5

This company is a significant element of the modernization battalion. It has a reconnaissance platoon; an antitank platoon equipped with the TOW missile system; and an air defense platoon equipped with the basic Vulcan gun. This unit also has an organic maintenance section which provides automotive, turret and vehicular recovery support. The PMO is very much concerned about the ability of the SANG to handle the complexity and span of control of such a unit. For example, if we look at just the recon platoon of this company we see it alone has 91 men, sixteen V-150 Commando cars, and four commercial vehicles; such a TO&E is essentially the equivalent of an armor company in the US Army. It is just too much for a Saudi Commander to handle at the platoon level. Consequently, the Project Manager is restudying this

company's TO&E to see if it can be simplified without compromising the support it must provide.

THE V-150 COMMANDO ARMORED CAR

Because of the relative ease of maintenance and longer cruising range, the Saudi Arabian National Guard had chosen to mount their mechanized battalions in Commando Cars. The Saudi Arabian Government did extensive research on the various types of Commando Armored cars available on the world market and settled on the V-150 Commando Armored car as the vehicle for the Modernized Battalions. The V-150 will be supplied in a combination of nine configurations designed to meet the needs of today's military environment in the Middle East. Configurations include the Command Vehicle, the Armored Personnel Carrier, 81MM Mortar Vehicle, Twin Machine Gun Turret Vehicle, 20MM Turret Vehicle, Oerlicon Model 204GK Automatic Cannon, 90MM Turret Vehicle, Mecar 90MM Cannon and a Recovery Vehicle.

The basic vehicle is a four wheeled, all wheel drive, gasoline engine powered chassis built into a completely enclosed Monocoque armored hull. It drives and maintains as easily as a truck and is as rugged as a tank. Commando operation and maintenance costs have proven to be less than 1/5 of comparable tracked vehicles and significantly less than other wheeled armored vehicles. The vehicle has an average operating range of 300 miles over varying terrain. Logistic support is easy because standard US military truck automotive components are used to a large degree and many of the parts are readily available in the US Army inventory.

COMMAND CONTROL AND COORDINATION OF THE SANG MODERNIZATION PROGRAM

The United States command line runs from the Department of Defense through the Department of the Army, through Commander Army Materiel Command (AMC) to the Project Manager Saudi Arabia National Guard Modernization Program. The Commander AMC give the Project Manager access to all the resources and capabilities of the various AMC commodity commands. Most of the tasks which are initiated in the modernization program are of such a politically, militarily and economically sensitive nature that they must be approved by the Saudi Arabian Government, Department of the Army, Office of the Secretary of Defense and the State Department. The latter approval comes through the US Ambassador to Arabia. He provides the Project Manager with in-country guidance affecting Saudi Arabia - United States relations.

An organization diagram of the command and control of Project Manager is shown below.

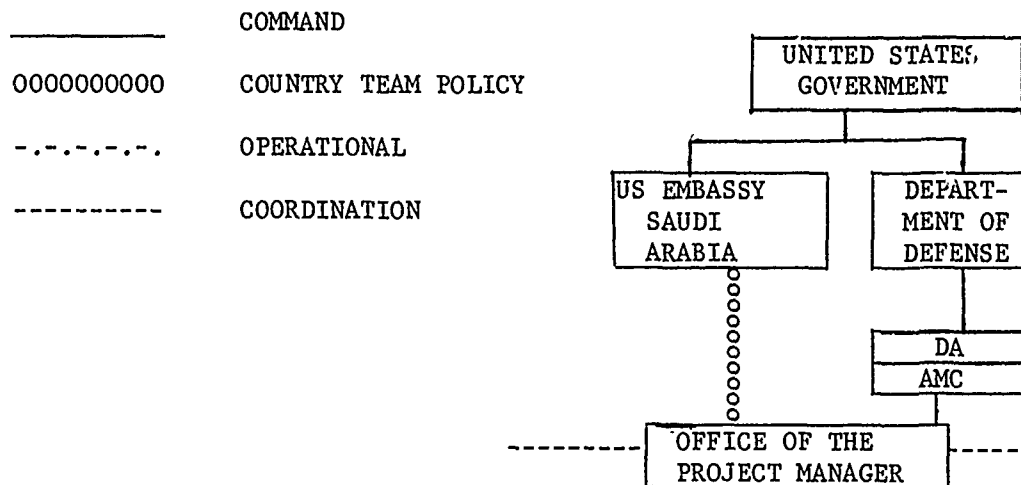


Figure 6

COORDINATION WITH THE NATIONAL GUARD

The coordination of the operation of the SANG Modernization Program is through the Joint Coordinating Committee. This committee was established by HRH Prince Abdullah to effect coordination of US - Saudi efforts for modernizing the National Guard. Members of the Committee for the SANG include His Excellency Shaik Tuwajeri, Deputy Assistant Commander of the National Guard, LTG Rasheed, Chief of the Staff of the SANG, Brigadier Donaldson, British Advisor to HRH Prince Abdullah and Mr. Quansi, Attorney Council for the National Guard. American representation on the committee include the Project Manager, his Deputy Project Manager and the Assistant Project Managers for Training Management and Logistics Management.

The committee convenes periodically to discuss and decide on major operational issues involving the organizing, equipping, or training of new battalions. The committee also conducts detailed cost and performance reviews for the project.

The coordination relationship between the Saudi Arabian Government and the U.S. Project Manager through the Joint Coordination committee is shown in Figure 7.

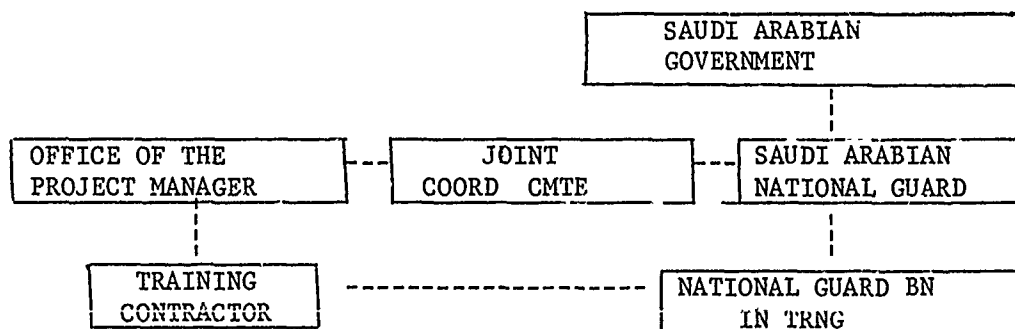


Figure 7

PROJECT MANAGER DATA

At the onset of the Program for Modernization of the SANG - Col Thomas A Mort was appointed Project Manager. He conducted the program through 20 May 1975. Col (P) Richard D Lawrence assumed command of the Project Manager's Office 21 May 1975. Col Lawrence was promoted to Brigadier General in the United States Army by His Royal Highness Prince Abdullah on 7 June 1975.

THE PROJECT MANAGER'S OFFICE ORGANIZATION

Traditionally - Project managership has been product oriented. I'd point out - however - that the project manager for SANG is cut from different cloth. The mission is to produce a force--not a piece of equipment. Explicitly--the Project Manager is required to organize--equip-train-and evaluate-a modern force. He does this through use of FMS sales cases to purchase the equipment and resources required. Implicit in this mission-is the requirement to provide plans for its sustenance and possible expansion. Stated simply, the mission involves operational military tasks and is something relatively new to project management.

The Project activity has been phased. The first was the Procurement Phase in which FMS Sales cases and contracts for training and sales cases for material and leases for administrative and housing space were executed. Administrative details and routines were worked out and finalized into appropriate Standardized Operating Procedures (SOP). April 14, 1975, was the initiation of the second-or implementation phase. On this date, contractor training activities physically began at Khashm Al-An Training Center. The Project Manager

no longer requires paramount emphasis in the procurement area. Now the Project Manager must concentrate on management of the organizing-training-and the evaluation phase. At this point, he must also begin to emphasize the doctrinal planning function. In order to accomplish his management function in the SANG, the Project Manager tailored his Project Manager Office Organization to conform to a management concept based on:

- Orientation to mission and alignment to environment
- Management by FMS sales case(budgeting, procurement training, review and analysis, plans/programs)
- Establishment of strong management information system to include review/analysis and planning capabilities
- Establishment of working "counterpart" program
- Expanded and more comprehensive COR program
- Establishment of reliable and responsive communications, internally and externally
- Need to enhance installation management capability

Shown here in figure 8 is an organizational structure that the Project Manager created to meet the task at hand.

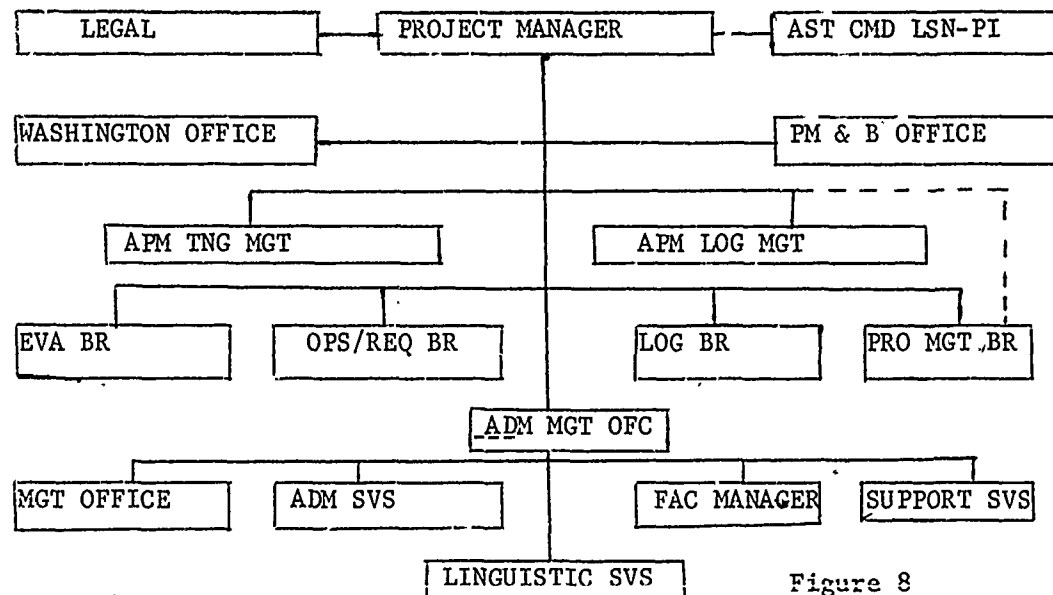


Figure 8

Projects like the SANG Modernization Program implicitly have a broader charter than simply military sales. The PM's charter requires him to organize, equip, and train four mechanized infantry battalions and an artillery battalion, however, it would be unconscionable on the US Government's part to do this-and walk away from the task without providing doctrinal studies, plans, and implementing procedures for sustainment of that force. Therefore the Project Manager's Office must have a strong programming and planning effort which at a minimum is capable of initiating concepts or of monitoring supporting studies and plans of the prime contractor.

The organization supports this effort. This structure is streamlined and is functionally aligned to maximize the utilization of personnel and manage by foreign military sales case. It provides for a management information. It recognizes the requirement for formal and continuing interface with the Saudis, at all staff levels. And in keeping with AMC guidelines, it makes provision for personnel identification and training program-from which future project managers can be selected.

Four of the divisions of the Project Manager's Organization deserve special discussion. These are the Washington Office, the Program Management and Budget Office, the Assistant Project Managers for Training and Logistics Management.

The Washington Office of the Project Office is the source of duplicate program information-capable of interface with the Project's Management information and budget office in Saudi Arabia. Its thrust is to collect, collate, and provide timely and accurate information

for use by AMC and DOD agencies and to fill the communications void caused by distance. It has accurate information available for use in decision making by DOD relevant to the political, military and economic environment in which the Project Manager must operate.

For efficient information gathering and collating, the Program Management and Budget office was established. Frequently, project managers are called upon to make program adjustments. These adjustments must be made with full knowledge of the impact on resources and performance and of the modifications necessary in program schedules. Anything less is unacceptable. It becomes a very difficult task. Critical information and capability for review and analysis - are fragmented throughout the Project Manager's office-ergo- unresponsive to the decision maker. Centralizing the management information review and analysis functions in the program management and budget offices allows: immediate availability and responsive use of all pertinent resource and performance data; continuing scrutiny and update of that data to obviate reaching-and implementing decisions-based on incomplete or untimely information; and special review in order to react to changes in priorities.

The following is a quote from General Sammett's letter to PMO SANG MOD PROGAM dated 14 May 75. "I am still extremely interested in enlarging the personnel base from which future project managers can be selected. The most recognizable part of this base is that called assistant project managers. Wherever possible on your TD, please use this title as part of the descriptive name of a job..."⁵

The Project Manager accomplished this by designating the two main subordinate chiefs (Training and Logistics) as Assistant Project Managers (APM). In the office of the APM for Training Management the evaluation branch was incorporated. It's functionalized by combat and combat service support categories, its mission is day to day observation and evaluation of the various contractors engaged in the overall training effort of the modernized battalions. The ops/reqmts branch is formed to provide positive coordination with the contractor's plans/doctrine & system office. The Project Manager has also recognized the critical need and formalized the operational liaison functions to HQ SANG. This has been accomplished by placing an Arab linguist US Army Officer as liaison officer at the National Guard with offices in the National Guard HQ and also in the Project Manager's Office. The Training Management APM's office will be capable of providing all inputs for contract award fee determinations since it embraces the COR for training.

APM for logistics and procurement management organization was designed to provide a positive and responsive interface between logistics and procurement. This will give the Project Manager the capability to manage efficiently all FMS cases from concept to contract completion. It provides the opportunity for cross training in associated disciplines and adds depth for the broad range of closely linked functions in procurement and logistics. With regard to the procurement management branch, a special relationship exists. The Project Manager has a special string on contract management so that those who have a requirement responsibility will not have sole

line authority over procurement processes. The procurement management branch is under the coordinating authority to the appropriate APM to more closely meld the logistics and procurement functions. For sales case processing he answers to the Project Manager on specific contracting issues.

In summary, the philosophy for the structuring of the organization was to research its mission and functionalize its explicit and implicit tasks and build a functional organization oriented to the tasks. The PMO organization contains a responsible high visibility management information office which is essential to the successful execution of the project. It specifically addresses a strong interface with the Saudis to initiate a viable counterpart program. And with the new structure, accomplishes what has burgeoned into a large installation mission. Finally the Project Manager's Office operates as a mini - MAAG and not a normal project one visualizes in AMC.

FUNDING THE PROGRAM

One master sales case (ZAC) is used to provide the overall funding of the Modernization Program for all materiel and services except construction. It was signed 19 April 1975 by HRH Prince Abdullah for an estimated cost of \$272.33 M. The monies in this master sales case are deposited by the Saudi Arabian Government and transferred to the individual Foreign Military Sales cases for specified supplies and service. It is these individual cases that furnishes training, equipment, ammunition and various services for the Modernization Program. The administrative transfer of these funds is done by

US Army International Logistics Center at New Cumberland, Pennsylvania. The Army Audit Agency has examined the Sales Case funding system of the PMO SANG, and have commented favorably on the effectiveness of the system.

FUNDING OF THE PROJECT

The Saudi Government initially authorized the expenditure of \$335 M on the Modernization Program. These are totally reimbursable funds which include costs of administration and support. The original cost estimates proposed in 1973 for the program and the present estimates are shown below in Figure 9.

\$ IN MILLIONS

SUMMARY OF FINANCIAL ESTIMATES

	1973 Planning Estimate	Current FMS Case Estimate	Total Increase Planning Estimate 30 June 75
Construction	63.00	111.70	+ .49
Training	104.72	195.66	90.94
Equipment	114.97	106.50	- 8.47
Ammo	40.77	59.26	+ 18.49
PMO/Misc	11.87	15.71	+ 3.84
Contingency	0	10.00	+ 10.00
	<u>335.33</u>	<u>387.13</u>	<u>163.80</u>

Figure 9

The financial status of the program follows: On 20 May 1975, at the first government-to-government review, the PMO presented two problems: (1) the program was faced with a cost growth since initial estimates were made in Dec 73 (2) The schedule of payments under the umbrella sales case ZAC were inappropriate to keep the cash flow ledger out of the red after February 1976. The funding overview above

highlights the cost growth milestones, our original program estimates total \$335 M, SANG then used this figure in their five year budget. Our June 75 estimate has an increase of \$163.8 M. This was largely due to high cost inflation factors, particularly in foreign ammunition, sole source direction of the major contractor, SANG designation for the Racal tactical radio system, and the unforeseen requirement for three major contractors during the life of the program. June totals changed slightly due to increased cost of twenty-two 105mm howitzers to be purchased in the U.S. for the artillery battalion.

On 15 June 1975, the Joint Coordinating Committee of the Saudi Arabian National Guard and the Project Manager's Office met to review total costs and schedule of payments problems for foreign military sales case ZAC, the following agreements were formulated:

(1) SANG approved the acceleration of cash payments of sales case ZAC to assure purchase of material and services for equippage of all modernized battalions and for training of battalions through 1977. An amendment to ZAC and engineer construction case HBB which reflects this acceleration was prepared.

(2) SANG agreed that programmed funds in ZAC would be expended according to an accelerated payment schedule allowing the program to operate in the black through April 76.

(3) SANG and PMO agreed to defer the approval of additional funds required until early 1976. At that time, estimated increases would be reviewed and refined, SANG would provide final requirements for war reserves, and another amendment to ZAC and HBB would be submitted to Ministry of Finance for approval.

CONSTRUCTION

On 11 July 1974 a Foreign Military Sales Case was signed by SANG for the Corps of Engineers' services and contracted costs relating to the planning, design and construction of facilities

Award Fee contracts were let. General Electric was awarded a contract for technical training of SANG personnel on Vulcan weapons system to include operation and maintenance support during the period the Vulcan unit is in training.

The total cost of the contract at award is as listed below:

Target Cost	\$5,800,000
Base Fee	192,000
Fixed Fee	312,000
Award Fee	384,000
Above Target Cost	1,450,000
Program Reimbursement	None
	<hr/>
	\$8,138,000 ⁸

Cadillac Gage Company was awarded a contract which includes training of Vinnell instructors to teach organizational maintenance of V-150 car to SANG personnel and calls for maintenance support for the V-150 Commando Car. Costs are as follows:

Target Cost	\$6,882,171
Base Fee	287,366
Fixed Fee	None
Award Fee	402,312
Above Target Cost	1,514,370
Program Reimbursable	None
	<hr/>
	\$9,086,219 ⁹

By early February Vinnell Corporation employees were on the ground in Saudi Arabia. In conjunction with personnel assigned to the Project Manager's Office, necessary training, logistics and mobilization plans were worked out to begin the training of the first SANG Modernization Program.

Training milestones are shown in Figure 11. The solid line represents the current point in time. Training of the first mechanized battalion began on 7 July 1975.

In all areas of construction the areas and ranges will be constructed equal to or better than US Army standard for the same facility.

The initial construction cost estimates were \$62,670,000, however, this estimate has been increased to \$111,622,000 due to changes in scope of work and increased inflation rate. As of this writing chances are cost will be higher before construction is completed as inflation is ever increasing in Saudi Arabia.

TRAINING OF THE MODERNIZATION FORCE

Under the terms of the agreement between the two governments, the training of the National Guard was to be accomplished by a US contractor. The Vinnell Corporation of Alhambra California was awarded the contract. The training of the modernized battalions for training will be performed at the Training Facilities constructed by the US Corps of Engineers at Khashm Al An. The contract is for three years and is expected that two plus mechanized battalions and one artillery battalion will be trained during the contract period. An option for the training of the 3d and 4th mechanized battalions will be offered to the Vinnell Corporation.

It was determined that the contract let to the successful bidder would be a cost plus award fee (CPAF). This provides a means of giving the contractor an incentive to improve his performance and earn more money. It works like this. The contract has a base fee, a maximum fee, and provisions for a variable award fee. The award fee is determined subjectively by the US Project Manager for the SANG Modernization Program based on periodic, after-the-fact evaluations of the contractor's performance by a selected board of his staff members. The award fee determination is subject to special checks and balances which provide procedural safeguards protecting both the Saudi Government and the contractor from arbitrary or capricious evaluations. The determination of the award fee is final and is not subject to

contest under the Disputes clause of the Armed Service Procurement
6
Regualtions.

The Statement of Work for the Training contractor includes specific requirements for Training, Logistics, Procurement, Program Support, and Plans, Doctrine and Systems. It is best illustrated in Figure 10.

PRINCIPAL TASKS OF VINNELL CORPORATION

TRAINING

LANGUAGE/LITERACY
REFRESHER CSOURCES
ADVANCED INDIVIDUAL TRAINING
UNIT TRAINING
ON-THE-JOB TRAINING

LOGISTICS

ORGANIZATIONAL (COMPANY & BATTALION SUP & MAINT)
DIRECT SUPPORT/GENERAL SUP SUPPLY & MAINT
ASSIST RECEIPT & PROCESSING OF EQUIP AT PORT FACILITIES, DAMMAM

PROCUREMENT

PURCHASE OF SUPPLIES TO SUPPORT THE MODERNIZATION PROGRAM

PROGRAM SUPPORT

MAINT OF PROGRAM FACILITIES & EQUIP
PRINTING AND REPODUCTION
COMMUNICATIONS

PLANS, DOCTRINE & SYSTEMS

DEVELOPMENT OF FUTURE AREAS FOR MODERNIZATION

As a result of Congressional interest, the following clauses were removed from the Vinnell Contract.

1. Women could not be employed at the training center
2. Contractor employees' haircuts would conform to US Army standards.
3. Contractor would not hire for work in Saudi Arabia any persons from countries not recognized by Saudi Arabia.
4. First choice for air transportation would be the Saudi Arabian Airlines.

These clauses were placed in the Request for Proposal and following

contract so that bidding contractors would be aware of Saudi customs and business desires. Based on DOD/DA guidance, those clauses have been removed from the Vinnell Contract and were not placed in the General Electric or Cadillac Gage contracts, which were awarded as sole source for Vulcan and V-150 maintenance and training.

Solicitations were sent out and four firms submitted proposals, Vinnell Corporation being one of the four. A successful offerer was selected, based on technical standing and final cost proposal by the Army Materiel Command Senior Board of Awards. The company selected by the Senior Board of Awards was submitted to HRH Prince Abdullah. The Prince indicated that it was not acceptable to the SANG. Prince Abdullah directed that the Vinnell Corporation of Alhambra, California, be sole source for the Training Contract for the National Guard. After many months of hard negotiations by the US Project Manager and Vinnell Corporation the Training contract was awarded on 7 January 1975. The total cost of the contract at award is as listed below:

Target Cost	\$55,847,559
Base Fee	763,318
Fixed Fee	3,040,391
Award Fee	2,131,291
Above Target Cost	13,181,559
Program Reimbursement	2,000,000
	<hr/>
	\$76,963,931 ⁷

Originally it was the intent of the training contract to encompass all training under one contractor and to sub-contract to others items peculiar to training such as training on the Vulcan and the V-150. It became obvious that the purposes of training could be best served if individual contracts were let for this training. Two other COST Plus

Award Fee contracts were let. General Electric was awarded a contract for technical training of SANG personnel on Vulcan weapons system to include operation and maintenance support during the period the Vulcan unit is in training.

The total cost of the contract at award is as listed below:

Target Cost	\$5,800,000
Base Fee	192,000
Fixed Fee	312,000
Award Fee	384,000
Above Target Cost	1,450,000
Program Reimbursement	None
	<hr/>
	\$8,138,000 ⁸

Cadillac Gage Company was awarded a contract which includes training of Vinnell instructors to teach organizational maintenance of V-150 car to SANG personnel and calls for maintenance support for the V-150 Commando Car. Costs are as follows:

Target Cost	\$6,882,171
Base Fee	287,366
Fixed Fee	None
Award Fee	402,312
Above Target Cost	1,514,370
Program Reimbursable	None
	<hr/>
	\$9,086,219 ⁹

By early February Vinnell Corporation employees were on the ground in Saudi Arabia. In conjunction with personnel assigned to the Project Manager's Office, necessary training, logistics and mobilization plans were worked out to begin the training of the first SANG Modernization Program.

Training milestones are shown in Figure 11. The solid line represents the current point in time. Training of the first mechanized battalion began on 7 July 1975.

TRAINING SCHEDULE MILESTONES

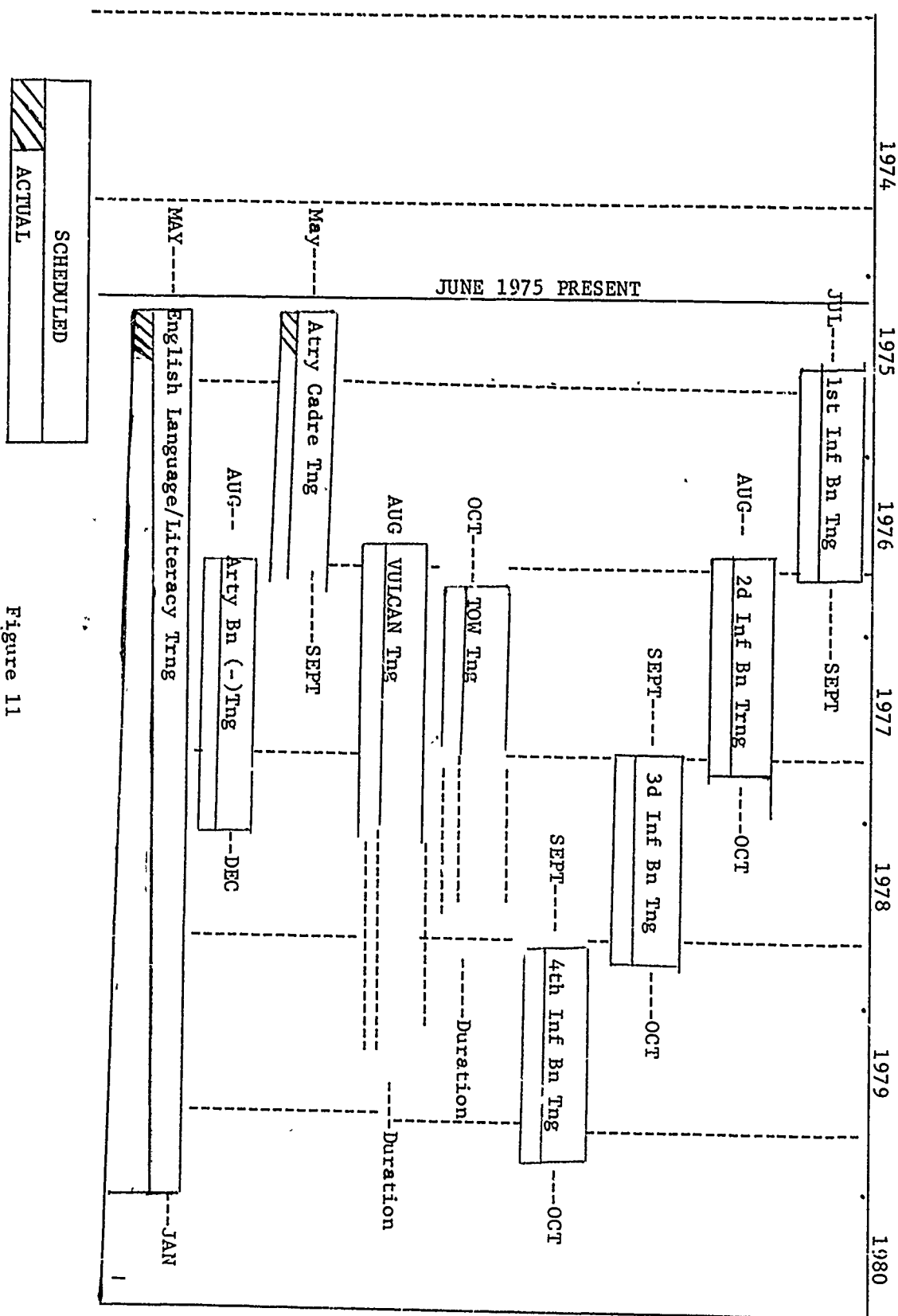


Figure 11

A summary listing of major items of equipment for the five Modernized Battalions is seen below:

US MILITARY EQUIPMENT

413	Commando Cars (Armored) V-150
29	TOW Missile Launchers
1224	TOW Missiles
30	Vulcan 20mm guns
22	105mm howitzers
40	81mm motars
333	50 cal Machine guns

NON US PROCUREMENT

600	RACAL Tactical Radios (England)
39	MECAR 90mm Guns (Germany)
29	OERLIKON 20mm guns (Switzerland)

AMMUNITION

The ammunition represented in the sales cases under Master Sales Case ZAC is currently costed at 59.16 million dollars. It includes ammunition for training and for war reserve based upon a number of days stockage. This ammunition purchase will be done in phases. Training ammunition will be purchased first. Construction of Ammunition Storage facilities will be accomplished on a time phase basis. As storage facilities are completed, war reserve ammunition will be ordered in-country for storage and ready access.

PMO/MIS FUNDS

These funds cover such things as housing, travel, household goods shipment, salaries and all miscellaneous PMO expenses. None of the Project Manager's Office personnel salaries are paid for by the U.S. Government. In fact, the entire program is funded by the Saudi Arabian Government. The inflation rate in Saudi Arabia and

the increased manpower requirements of the program has caused the current cost estimate, for the FMS case to be \$15.71 million dollars.

CONTINGENCY FUND FOR UNPROGRAMMED REQUIREMENTS

In order to have a reserve for items that must be accomplished but were unexpected and not funded, the Project Manager has established a contingency fund of \$10 million dollars.

Experience has shown many requirements do not become identified until after FMS cases are started. Examples of such past and possible future requirements are:

- Language Laboratory at Training Center
- Military Publications
- DCAA Resident Auditor
- Air Shipment of Deadline Repair Parts
- Damman Port Advisory Team
- Larger Project Manager Staff
- Unanticipated increases in office/quarters leases
- Improved SANG Transportation System
- Improved SANG Maintenance Management System
- Improved SANG Personnel Management System

MAINTENANCE MANAGEMENT SYSTEM

The US Project Manager, General Lawrence, has developed a logistics concept for spanning the gap between interim and long range logistics support. The concept envisions that the contractor, through the use of mobile contact teams, will provide the support link between deployed units and the fixed DS/GS facility located at Khashm Al An. This support will exist until a viable maintenance management system is developed and implemented. The concept is depicted in Figure 12.

LOGISTICS CONCEPT

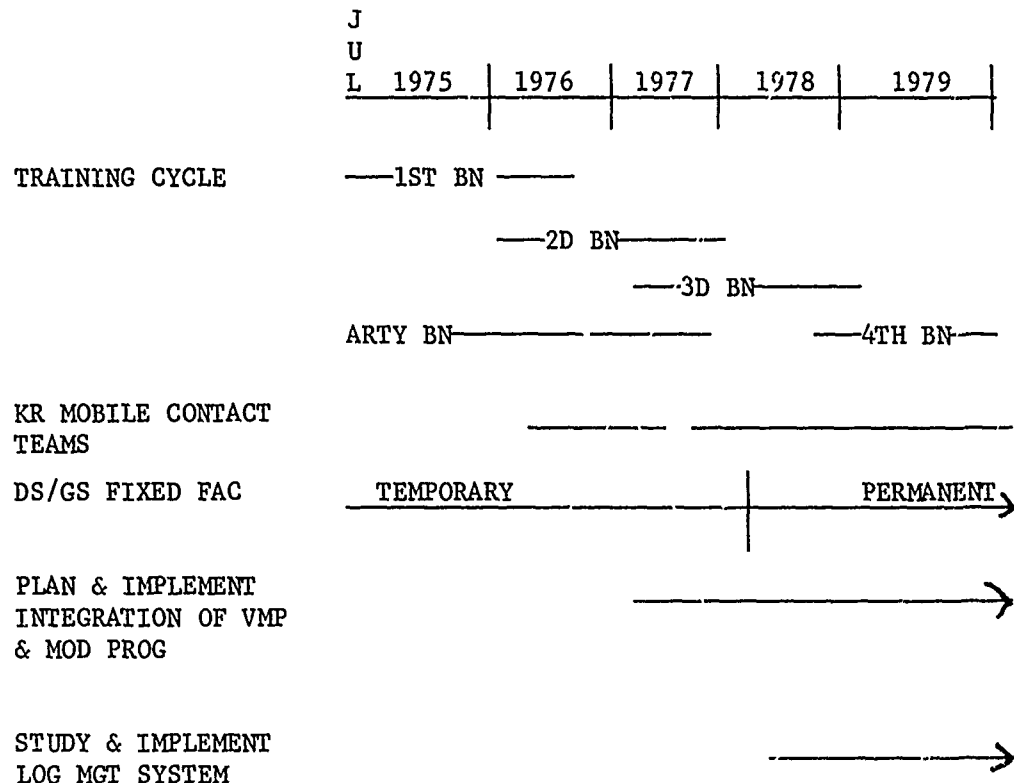


Figure 12

The Maintenance Management System referred to is no more than an expansion of the Chrysler Vehicle Management Program to include maintenance and supply of modernized battalion equipment and an interface of the forms and procedures of the modernization programs.

Beyond this, the SANG requires a total Logistics System which encompasses all commodities and logistics functions. The maintenance management of VMP and Modernized Battalions would then fall into this total Logistics Management System.

Since this concept is far beyond the scope of the current Memorandum of Understanding, decisions would be required on the additional extent to which the Department of Defense would wish

to become involved.

The Project Manager reasons the future of the trained battalions is in jeopardy unless an organized maintenance support system is implemented within the SANG.

CONCLUSIONS

The Project for Modernization of the Saudi Arabian National Guard has made considerable progress. Equipment is on schedule and training is underway. The four Mechanized Infantry Battalions and the 105 Howitzer Battalion will be equipped, trained and maintained. However, this is only the start. If the SANG is to be a truly modern fighting force, a centralized program under one head, i.e., a U. S. Project Manager, must be instituted which will coordinate other attempts of improvement of the National Guard such as the Vehicle Maintenance Program. All Battalions of the SANG will eventually require modernization. A nationwide Command Communication system, a Logistics Management System, a Personnel Management System, an Ammunition Storage Plan and Study and SANG Tactical Organization and Employment and the training of a competent Staff elements at Headquarters, regions and battalion levels are all crying necessities for the SANG.

What is the purpose of it all? Why does the United States spend its military effort and sell defense materials to Saudi Arabia? The answer is that it serves the national purpose of the United States. It keeps the Saudis in the camp of the United States, allows recycling of Petro dollars back into the United States economy and

more important lets the United States keep a string on the Saudi Arabian Armed Forces through their dependence on the United States for military supplies.

In spite of the logical approach to the problem, there are those who do not agree that the SANG Modernization is in the best interest of the United States. The SANG Modernization Program and Saudi Arabia have been embroiled in a nearly continuous controversy as a result of the close surveillance by the U. S. Congress, and coverage by the U. S. and Mid-east media. The embarrassment caused the Saudi Royal family by the adverse media coverage of the matter has been considerable.

The Agents' fee controversy is but one, albeit the current cause celebre. By way of background, most foreign contractors doing business in Saudi Arabia and nearby countries have agency agreements with established Mid-east representatives. The major contractors involved with this SANG Modernization Project are no different. Vinnell, Cadillac Gage, and GE, the latter indirectly through a sub-contractor, are all charging the costs of their agents' fees to this Project. When contracting with the government, agency relationships must be formally documented prior to contract award. In the case of our major training contracts, such documentation was obtained.

Until recently, the Commander of the SANG, Prince Abdullah, had only been informally made aware of some of the details of our contracts in support of the modernization effort. Generally speaking, the Prince doesn't get involved in such matters and he has shown no


interest in becoming involved. In fact, he recently has expressed his displeasure to the Project Manager for raising too many such detail matters to his attention, and on several occasions he has expressed his position which is: He hired the United States to get the job done, and that the PMO should get on with it.

The Department of Defense, through its defense security assistance agency, has reacted to this matter by issuing policy guidance to the other departments, and they in turn to the contracting officers in the field, which requires that all FMS contracts awarded in certain Mid-east countries, Saudi Arabia included, must either eliminate agents' fees or contain formal documentation that the funding government specifically recognizes the agency relationships and concurs in the amount of the agents' fee.

While it is doubtful Prince Abdullah would have made such acknowledgements before the current controversy, the PMO is now certain he will not make such specific and formal acknowledgements after the serious embarrassment of his half-brother, Prince Sultan, the Minister of Defense, over the same issue. Prince Abdullah, and presumably other members of the Royal Family, consider the whole issue, and particularly the latest DOD guidance, to be a harassment of them by the United States, and another ploy by which the U. S. Government fails to fully support the Saudis after having signed a Memorandum of Understanding and accepted Saudi Government funds. They believe these moves to be a considered attempt to subvert Saudi and U. S. Government relations by certain individuals of the U. S.

Congress who consistently take positions inimicable to the Saudi Arabian Government.

The Project Manager senses their patience is being strained to the limit; hence is concerned as it risks the continuation of the project. If these kinds of harrassments continue, I submit the United States hold on the future of Saudi Arabia will be tenuous.


JAMES D. SMITH
Colonel, OD

FOOTNOTES

1. Memorandum of Understanding concerning the Saudi Arabian National Guard Modernization Program, 19 March 1973.

2. Ibid, p. 4.

3. U. S. Department of the Army TAG letter DAAG-PAP-ACMJ 27 April w/indorsement DALO-ILS-D, Subject: Saudi Arabian National Guard Modernization Program dtd 27 April 1973.

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6. U. S. Department of Defense Armed Forces Procurement Regulations Section 3-405.5, p. 3-37.

7. U. S. Department of the Army AMC Contract DAAG99-75-C-0007 dtd 7 Jan 75 (Vinnell Training Contract with SANG), p. E.2.

8. U. S. Department of the Army AMC Contract DAAG99-75-R-0001 dtd 20 Jun 75 (General Electric Contract/SANG Support), p. E.1.

9. U. S. Department of the Army AMC Contract DAAG99-75-C-0014 dtd 16 Jul 75 (Cadillac Gage/SANG Support), p. E.1.

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The text outlines the development and organization of the Project Manager's Office for the modernization of the Saudi Arabian National Guard. It lays out the managing of the program through FMS sales cases to include materials, construction and contract training of the National Guard Units by a U.S. Contractor. It gives examples of the modernized units organization and lists equipment and costs associated with the program. The Essay presents a pattern for a new type of military		

Item 20 continued.

assistance through U.S. Army management and U.S. civilian contractors. Data was gathered using U.S. Government official records and records of the Government of Saudi Arabia, personal interviews and on site experience of the author. The effects of Political and Press pressures are examined as it effects the continuation of the United States influence in Saudi Arabia.